

BookletChart™

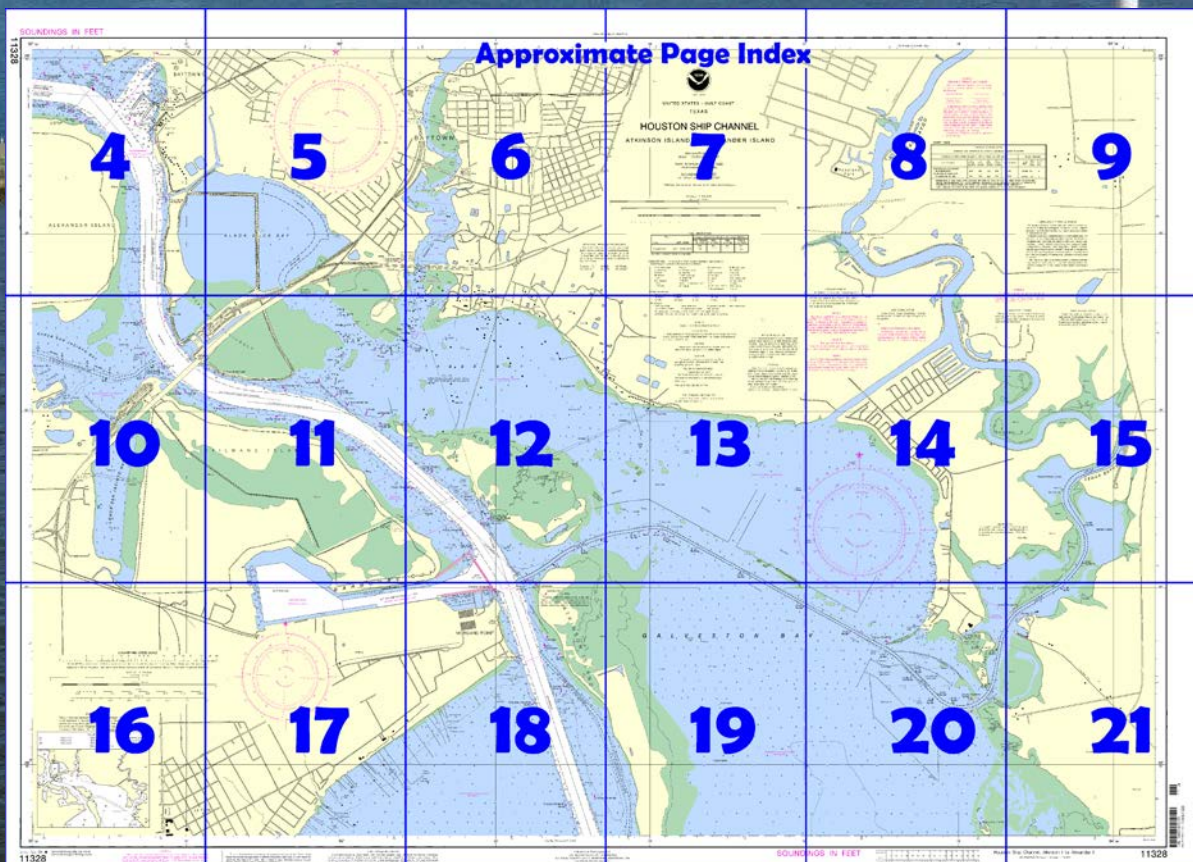
Houston Ship Channel Atkinson Island **NOAA Chart 11328**



A reduced-scale NOAA nautical chart for small boaters
When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

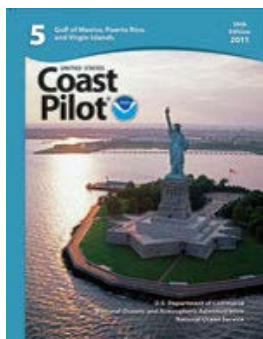
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=11328>



[Coast Pilot 5, Chapter 10 excerpts]

Galveston Bay is a large irregularly shaped shallow body of water on the coast of Texas, about 285 miles W from Southwest Pass and 690 miles NW from Dry Tortugas. The bay is about 30 miles long in a general NNE and SSW direction, about 17 miles wide at its widest part, and has general depths of 7 to 9 feet.

A highway bridge 9.7 miles above the entrance and a railroad bridge 13.4 miles above the entrance have fixed spans with a

minimum clearance of 18 feet. In October 1982, the highway bridge was

being modified to provide a clearance of 18 feet. A highway bridge crossing a cutoff between **Boaz Island** and the mainland has a 13-foot fixed span with a clearance of 6 feet. Only very small craft use the cutoff. Shallow **Tabbs Bay** is at the NW end of Galveston Bay, and contains numerous oil well structures and overhead power cables. There are no defined channels; the average depth is reported to be less than 3 feet. A channel from Houston Ship Channel follows the W end of **Hog Island** and Tabbs Bay to **Baytown** on the N shore. **Goose Creek** is navigable for craft drawing up to 5 feet to a highway bridge 2.8 miles above the entrance. The channel, unmarked and ill-defined, runs close aboard the N shore of the island N of the W end of Hog Island and leads to Goose Creek. Private poles and markers may at times mark the preferred route. Goose Creek contains numerous oil wells, pipelines, pilings, and other hazards; local knowledge is advised. The creek is used by oil well supply and commercial fishing vessels.

The highway bridge 2.8 miles above the entrance has a 48-foot fixed span with a clearance of 9 feet. Two highway and two railroad bridges between the entrance and this bridge have fixed spans with a minimum width of 32 feet and minimum clearance of 14 feet. Overhead power cables crossing the creek between the mouth and the highway bridge 2.8 miles above the entrance have a least clearance of 36 feet.

Barbours Cut, opposite Hog Island, extends about 1.2 miles W from Houston Ship Channel. A privately dredged area extends W about 0.6 mile into the cut from Houston Ship Channel. A turning basin, at the head of the cut and W of the dredged area, provides excellent shelter in depths of 20 to 26 feet for vessels up to 150 feet long.

Morgans Point is on the NW end of Galveston Bay on the W side of Houston Ship Channel. **La Porte**, a town 2 miles SW of Morgans Point, has rail and highway connections with other parts of the State.

Houston Ship Channel extends from Galveston Harbor across Galveston Bay and through parts of San Jacinto River and Buffalo Bayou to the city of Houston, a distance of 44 miles.

N of Bolivar Peninsula, spoil banks on both sides of the channel extend N to **Red Fish Bar**. About 1.5 miles below Red Fish Bar, a narrow channel marked at the entrance by Daybeacon 1, exits Houston Ship Channel to the W, leading to Dickinson Bayou. In March 1985, the controlling depth through the spoil bank was 6 feet. Along the NE side of Houston Ship Channel N of Red Fish Bar, several openings through the spoil bank permit passage into the NE portions of Galveston Bay. One of these, **Fivemile Cut**, about 8 miles above Red Fish Bar and E of Red Bluff is dredged. In January 2002, the controlling depth was 4.2 feet (4.6 feet at midchannel). The channel is marked by buoys.

The Coast Guard advises vessels exercise particular caution where the channel intersects the Intracoastal Waterway, about 6.6 miles above the entrance jetties and just below Lighted Buoys 25 and 26. Situations resulting in collisions, groundings, and close quarters passing have been reported by both shallow and deep-draft vessels. The Coast Guard has requested vessels make a **SECURITE** call on VHF-FM channel 13 prior to crossing the Intracoastal Waterway, particularly during periods of restricted visibility.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC New Orleans

Commander
8th CG District (504) 589-6225
New Orleans, LA

Navigation Managers Area of Responsibility



NOAA's navigation managers serve as ambassadors to the maritime community.

They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit nauticalcharts.noaa.gov/service/navmanagers

To make suggestions or ask questions online, go to nauticalcharts.noaa.gov/inquiry.

To report a chart discrepancy, please use ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx.

Lateral System As Seen Entering From Seaward

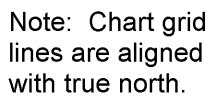
on navigable waters except Western Rivers



For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area.

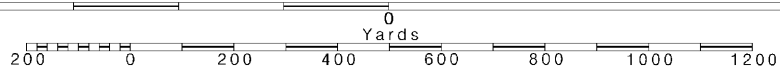
These volumes are available online at <http://www.navcen.uscg.gov>

4



SCALE 1:10,000
Nautical Miles

See Note on page 5.



59'

Joins page 5

BAYTOWN

NOAA
The
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as much
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Galveston
Houston,

Joins page 12

Printed at reduced scale. ~~SCALE 1:10,000~~
Nautical Miles

See Note on page 5.

Note: Chart grid lines are aligned with true north.

6

58'

57'

Goose Creek

Tower



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - GULF COAST

TEXAS

HOUSTON SHIP CHANNEL

ATKINSON ISLAND TO ALEXANDER ISLAND

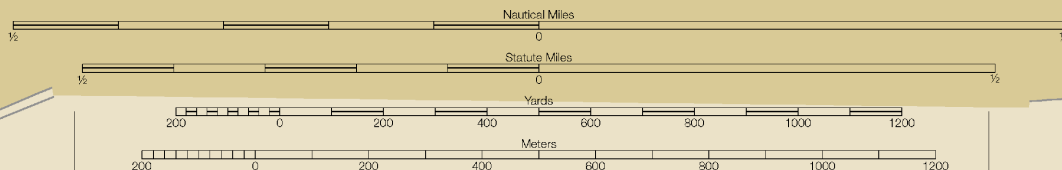
Mercator Projection
Scale 1:10,000 at Lat 29°43'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

SCALE 1:10,000



TIDAL INFORMATION

PLACE	NAME (LAT/LONG)	Height referred to datum of soundings (MLLW)		
		Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
	Morgans Point (29°41'N/094°59'W)	1.3	1.2	0.1

Dashes (---) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the internet from <http://tidesandcurrents.noaa.gov>. (Mar 2016)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Is isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	OC occulting	SEC sector
C can	M nautical miles	Or orange	ST M statute miles
D/A diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Cys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
21 Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.			

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additions of Engineers, Geological Survey,

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an

NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed provide continuous weather broadcasts. The reception range is typically 20 to 40 miles from the antenna site, but can be as high as 100 nautical miles for stations at sea.

Station, TX KHB-40 162.55 MHz
Station, TX KGG-68 162.40 MHz

Joins page 8

NOTE A

Navigation regulations are published in the Coast Pilot 5. Additions or revisions published in the Notices to Mariners. In the regulations may be obtained at the Office of the District Engineer, Galveston, TX. Refer to charted regulation section.

CAUTION

Gas and Oil Well Structures
Numerous uncharted gas

Last Correction: 9/28/2016, Cleared through:
LNM: 4516 (11/8/2016), NM: 4416 (10/29/2016)

7



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - GULF COAST

TEXAS

HOUSTON SHIP CHANNEL

ATKINSON ISLAND TO ALEXANDER ISLAND

Mercator Projection
Scale 1:10,000 at Lat 29°43'North American Datum of 1983
(World Geodetic System 1984)SOUNDINGS IN FEET
AT MEAN LOWER LOW WATERAdditional information can be obtained at nauticalcharts.noaa.gov.

SCALE 1:10,000

Nautical Miles

Statute Miles

Yards

Meters

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
Morgans Point	(29°41'N/094°59'W)	feet 1.3	feet 1.2	feet 0.1

Dashes (---) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the internet from <http://tidesandcurrents.noaa.gov>.

(Mar 2016)

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Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical miles	Or orange	St M statute miles
D/A diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WhIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
(1) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.			

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions refer to the North American Datum of 1927.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 5. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 8th Coast Guard District in New Orleans, LA or at the Office of the District Engineer, Corps of Engineers in Galveston, TX.

Refer to charted regulation section numbers.

CAUTION

Gas and Oil Well Structures
Numerous uncharted gas and oil well

AIDS TO NAVIGATION

Consult the U.S. Coast Guard supplemental information and navigation.

SUBMARINE PIPELINES AND

Uncharted submarine pipelines may exist in the vicinity of oil well

Joins page 7

Joins page 14

8

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. — SCALE 1:10,000 —

Nautical Miles

Yards

See Note on page 5.

200 0 200 400 600 800 1000 1200

ON CHART 11328

56'

94°55'W

29°
44'

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine
cables and submarine pipeline and cable areas
are shown as:



Additional uncharted submarine pipelines
and submarine cables may exist within the area
of this chart. Not all submarine pipelines and
submarine cables are required to be buried, and
those that were originally buried may have
become exposed. Mariners should use extreme
caution when operating vessels in depths of
water comparable to their draft in areas where
pipelines and cables may exist, and when
anchoring, dragging or trawling.

Covered wells may be marked by lighted or
unlighted buoys.

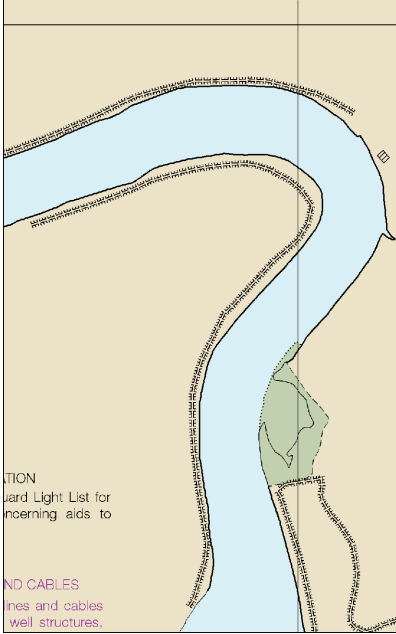
BAR BAYOU

HOUSTON SHIP CHANNEL DEPTHS								
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEB-APR 2015								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOW TIDE (MLT)					PROJECT DIMENSIONS			
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH MLLW (FEET)
76 TO LOWER END MORGANS POINT	44.0	50.0	49.0	45.0	8-14	530	5.49	45
LOWER END MORGANS POINT CUT TO ON OIL CO. SLIP	39.0	46.0	46.0	43.0	9-14	400-525	4.39	45
ON OIL COMPANY SLIP TO PENITENS BAYOU	A 40.0	46.0	47.0	40.0	12-14	400-525	5.49	45

CHANNEL WIDENS 125 FEET IN LEFT OUTSIDE QUARTER IN VICINITY OF EXXON OIL CO.

INFORMATION IN THIS TABULATION HAS BEEN PROVIDED TO NOAA BY THE U.S. ARMY CORPS OF ENGINEERS.
DEPTHs ARE REFERENCED TO A LOCAL DREDGING REFERENCE CALLED MEAN LOW TIDE. FOR AN APPROXIMATE
CONVERSION TO MEAN LOWER LOW WATER, ADD 1 FOOT TO EACH DEPTH IN THE TABULATION.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION



UTION
uard Light List for
nforming aids to

ND CABLES
ines and cables
well structures,

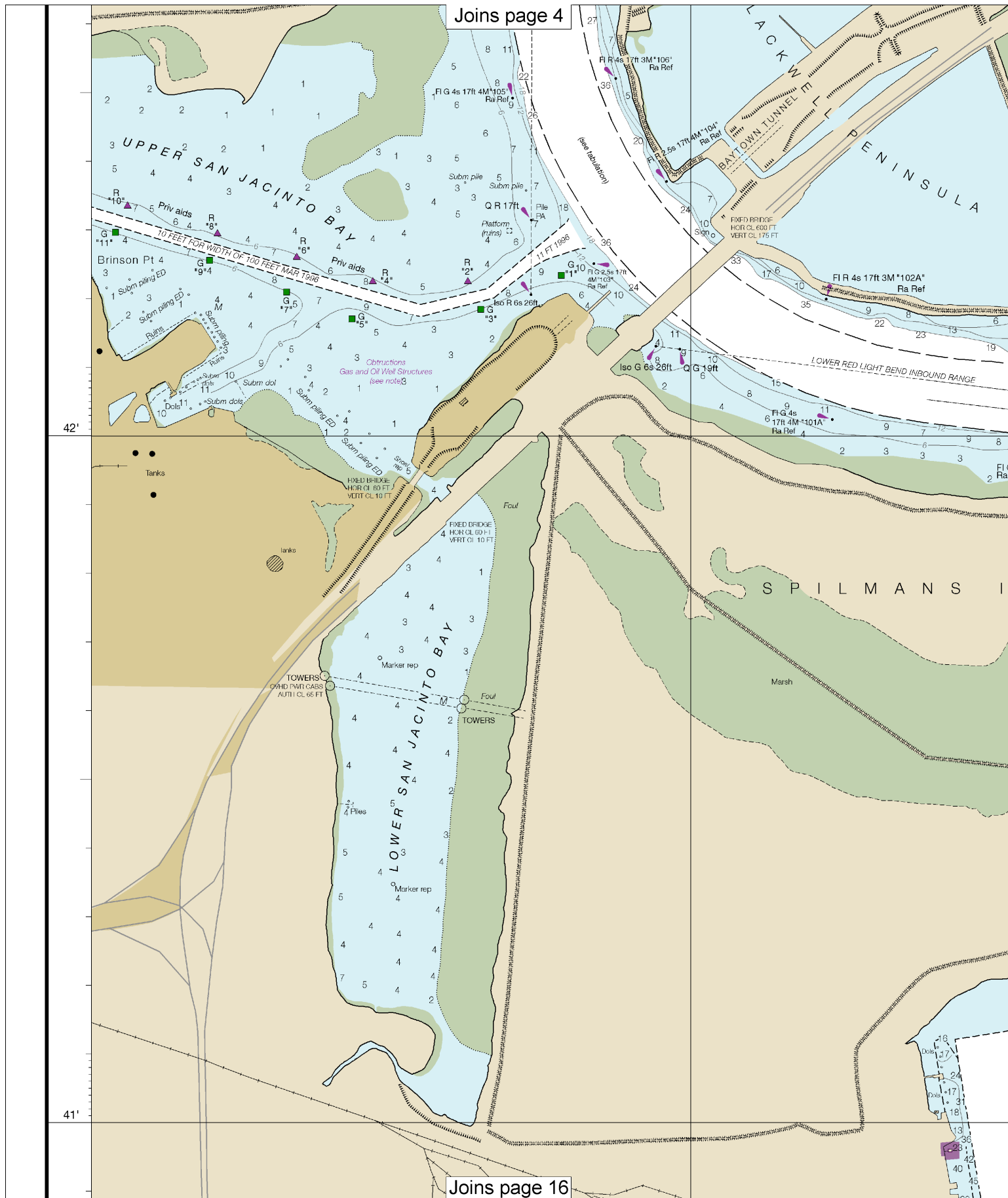
POLLUTION REPORTS
Report all spills of oil and hazardous sub-
stances to the National Response Center via
1-800-424-8802 (toll free), or to the nearest U.S.
Coast Guard facility if telephone communication
is impossible (33 CFR 153).

WARNING
The prudent mariner will not rely solely on
any single aid to navigation, particularly on
floating aids. See U.S. Coast Guard Light List
and U.S. Coast Pilot for details.

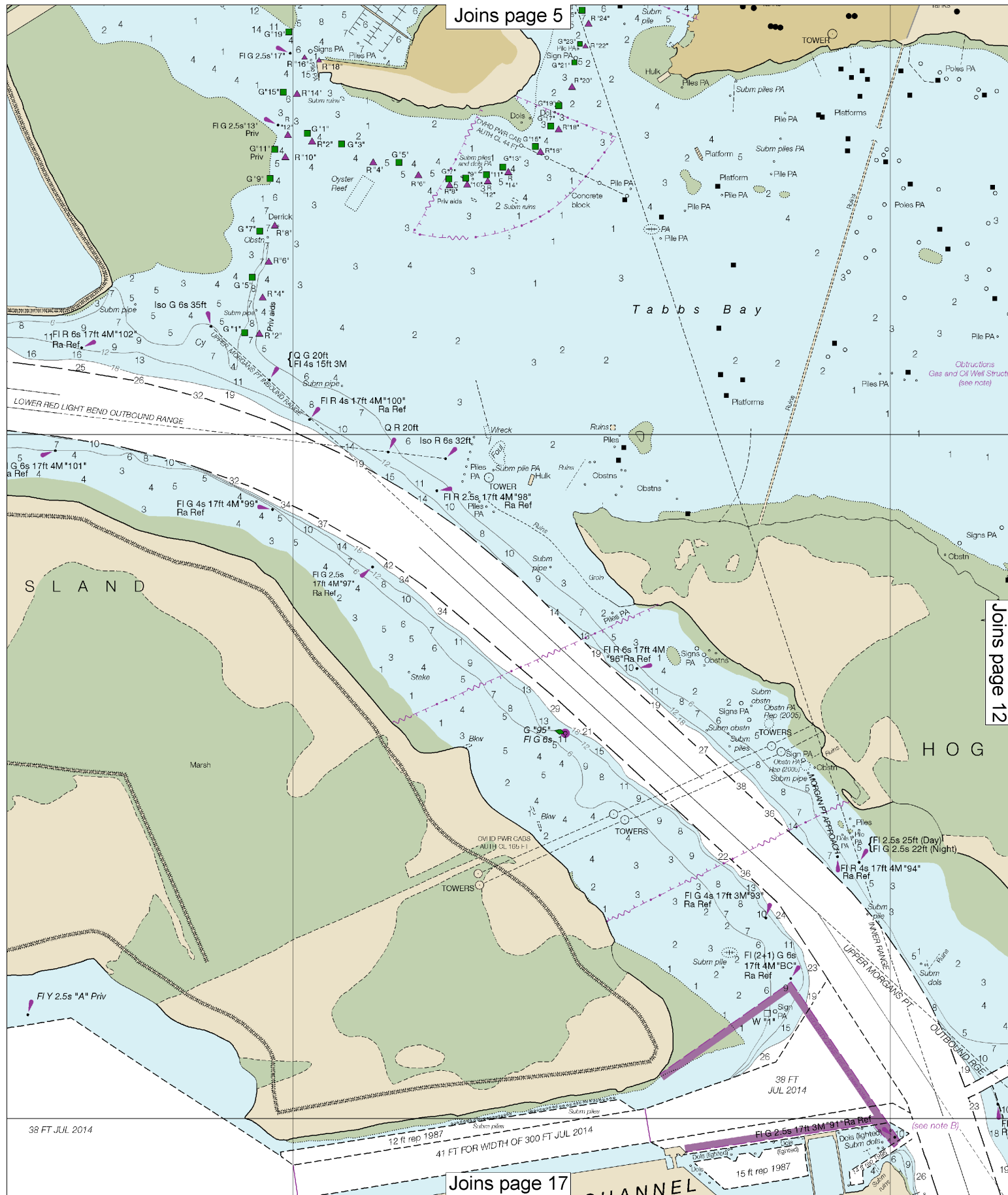
RADAR REFLECTORS
Radar Reflectors have been placed on many
floating aids to navigation. Individual radar
reflector identification on these aids has been
omitted from this chart.

HURRICANES AND TROPICAL STORMS
Hurricanes, tropical storms and other major storms may
cause considerable damage to marine structures, aids to
navigation and moored vessels, resulting in submerged
debris in unknown locations.
Charted soundings, channel depths and shoreline may
not reflect actual conditions following these storms. Fixed
aids to navigation may have been damaged or destroyed.
Buoys may have been moved from their charted positions,
damaged, sunk, extinguished or otherwise made
inoperative. Mariners should not rely upon the position or
operation of an aid to navigation. Wrecks and submerged
obstructions may have been displaced from charted
locations. Pipelines may have become uncovered
or moved.
Mariners are urged to exercise extreme caution and are
requested to report aids to navigation discrepancies and
hazards to navigation to the nearest United States Coast
Guard unit.

Joins page 15



Joins page 5



Joins page 12

Joins page 17

ED existence do
21, Wreck, rock,
(2) Rocks that o

PD position doubtful Subm submerged
Rep reported
a depth indicated.
above datum of soundings.

Navigation regulations are published Coast Pilot 5. Additions or revision published in the Notices to Mariners. In the regulations may be obtained at Commander, 8th Coast Guard District in at the Office of the District Engineer, C Galveston, TX.

Refer to charted regulation se

Heights in feet above Mean High Water.

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

The National Ocean Service acknowledges the exceptional cooperation received from members of the Galveston Bay Power Squadron, District 21, United States Power Squadrons, in continually providing essential information for revising this chart.

Consult U.S. Coast Pilot 5 for important supplemental information.

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of .822" northward and .740" westward to agree with this chart.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

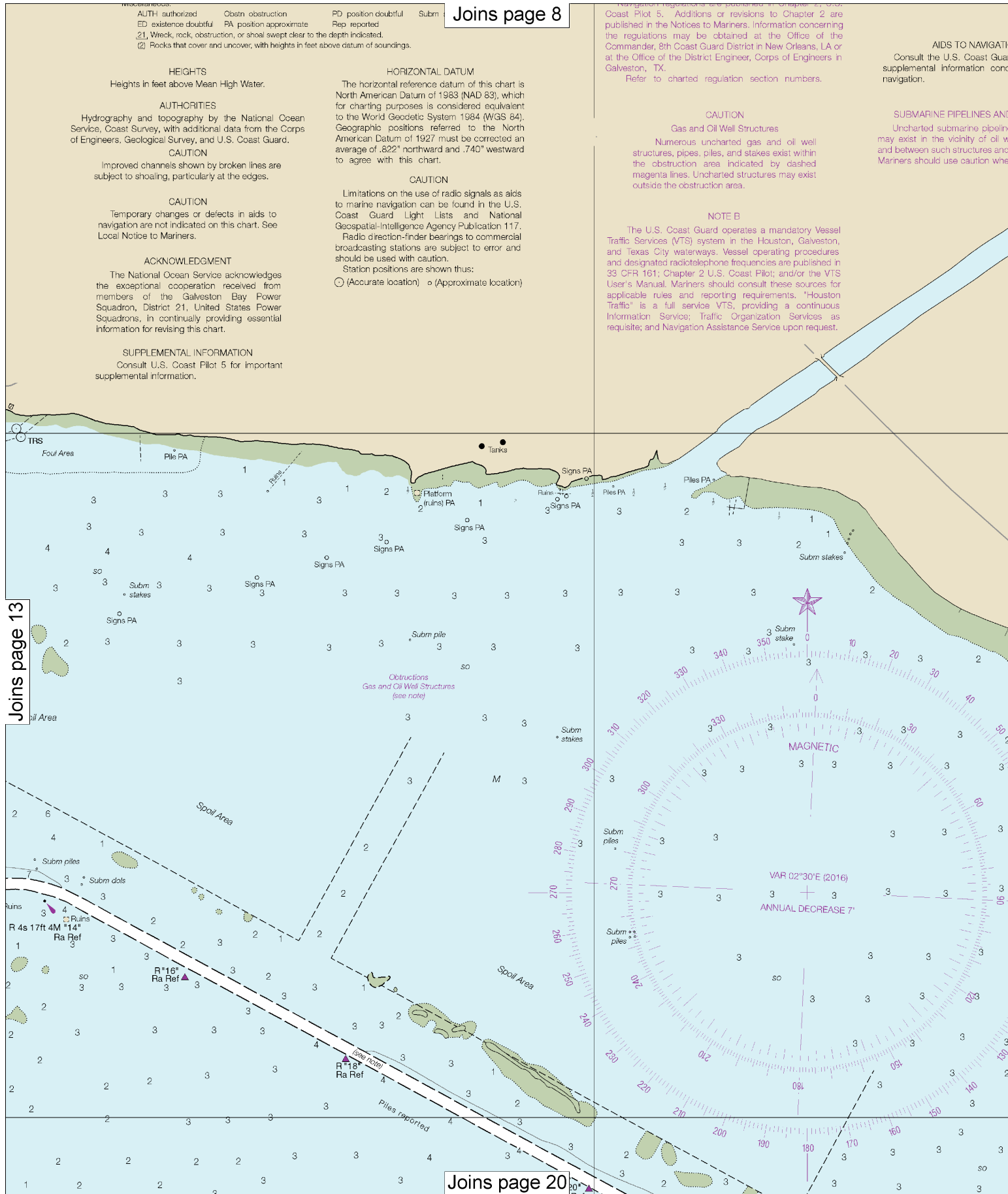
⊙ (Accurate location) ○ (Approximate location)

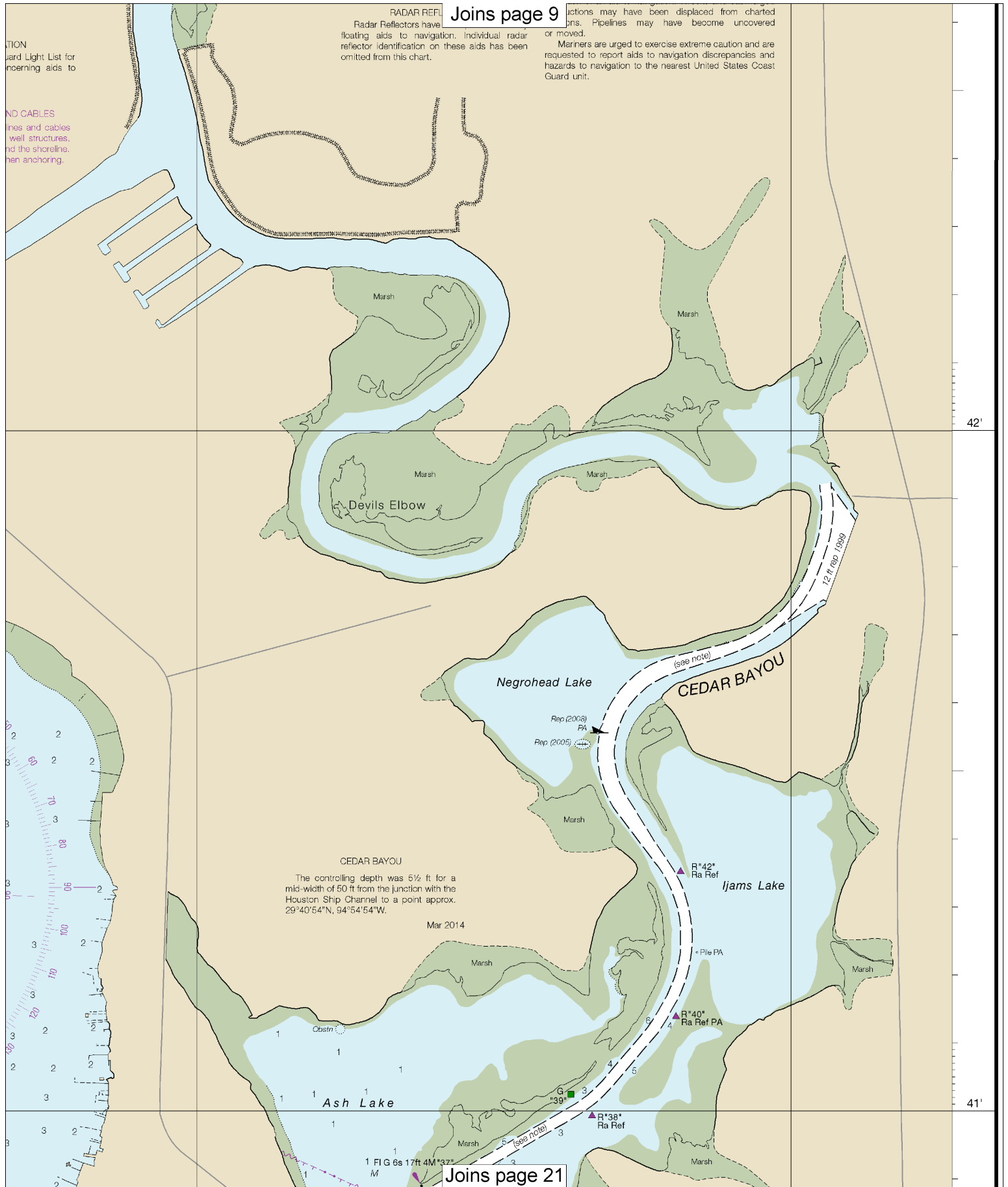
Numerous uncharted gas structures, pipes, piles, and staks the obstruction area indicated magenta lines. Uncharted structures outside the obstruction area.

The U.S. Coast Guard operates Traffic Services (VTS) system in the Houston and Texas City waterways. Vessel operators and designated radiotelephone frequencies are listed in 33 CFR 161; Chapter 2 U.S. Coast Guard's User's Manual. Mariners should consult applicable rules and reporting requirements. Traffic is a full service VTS, providing Information Service; Traffic Organization; and Navigation Assistance Service.

Joins page 14

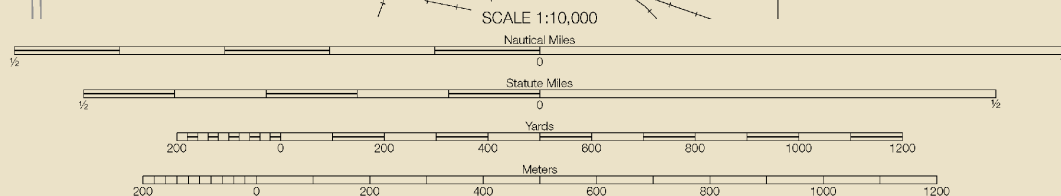
Joins page 19





Joins page 10

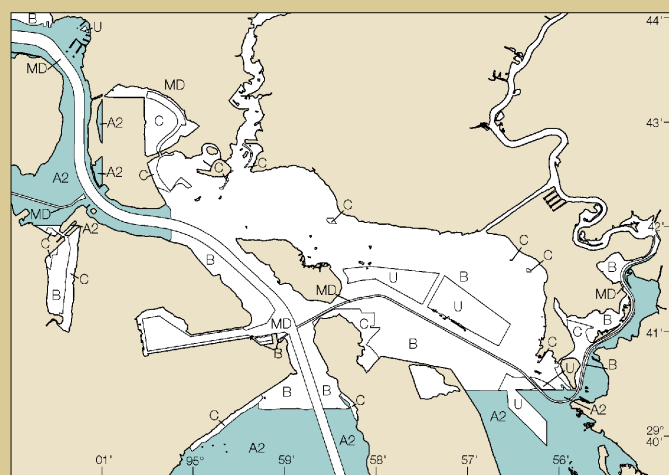
41'



ZOC CATEGORIES (Refer to Chapter 1, United States Coast Pilot)				
ZOC	DATE	POSITION ACCURACY	DEPTH ACCURACY	SEAFLOOR COVERAGE
A2	1996	± 66 ft	= 3.3 ft + 2% d	All significant seafloor features detected.
B	1965 - 1996	± 164 ft	= 3.3 ft + 2% d	Uncharted features hazardous to surface navigation are not expected but may exist.
C	1931 - 1933	± 1600 ft	= 6.6 ft + 2% d	Depth anomalies may be expected.
U	Unassessed - The quality of the bathymetric data has yet to be assessed.			
MD	Maintained Depth - See Chart			

29°

40'



La Porte

95°02'W

01'

29th Ed., Apr. 2016

11328

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

NOAA encourages users to submit inquiries, discuss this chart at <http://www.nauticalcharts.noaa.gov/staff/c>

Last Correction: 9/28/2016, Cleared through:
LNM: 4516 (11/8/2016), NM: 4416 (10/29/2016)

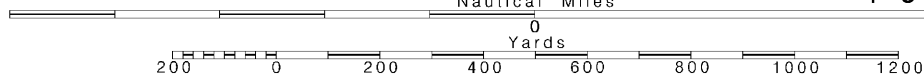
16

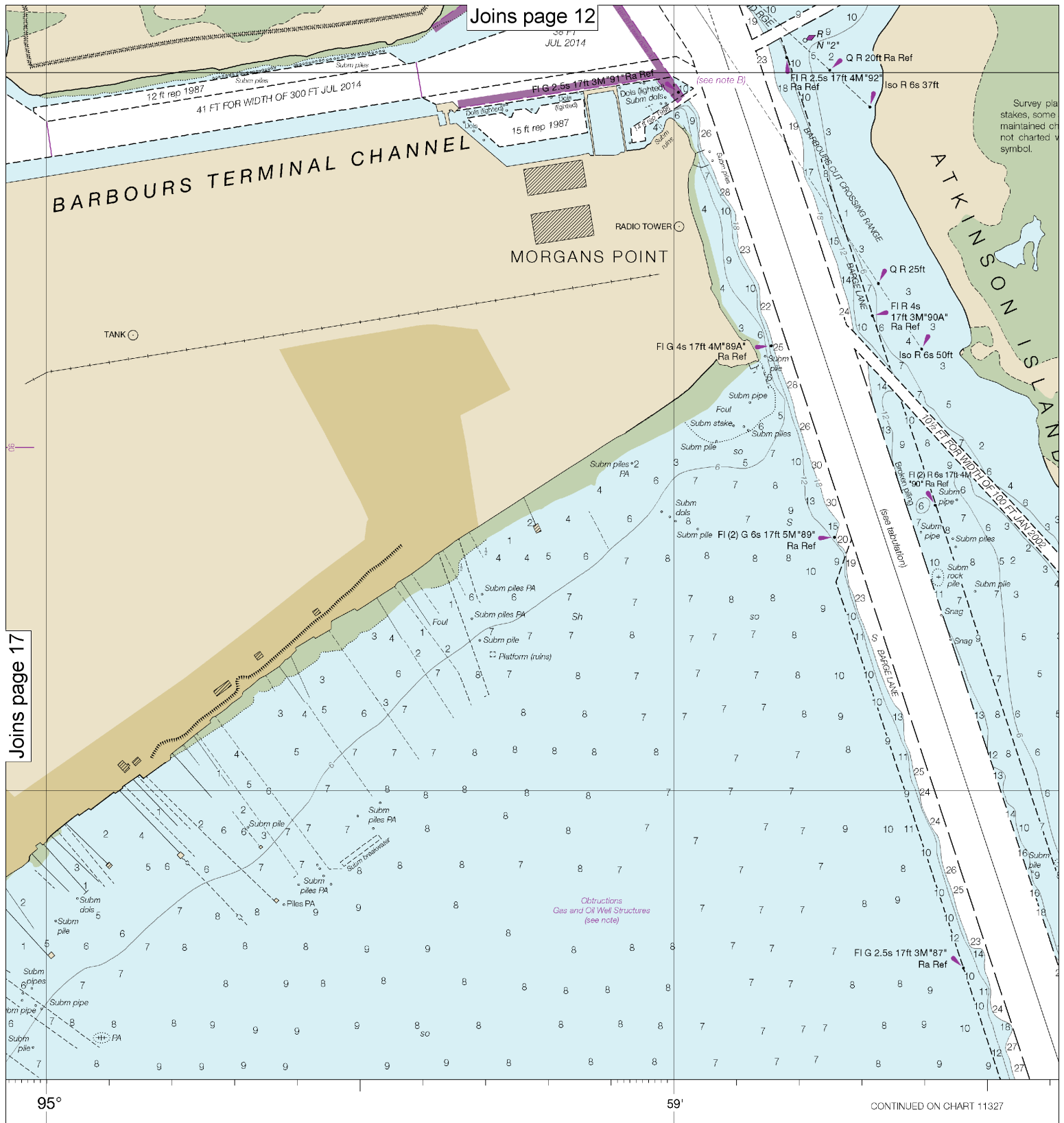
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.



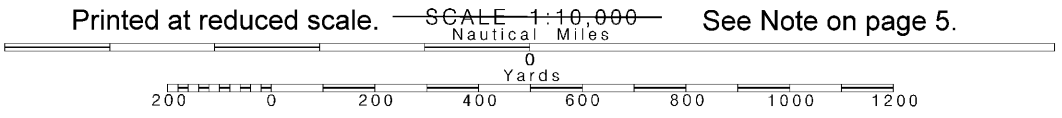


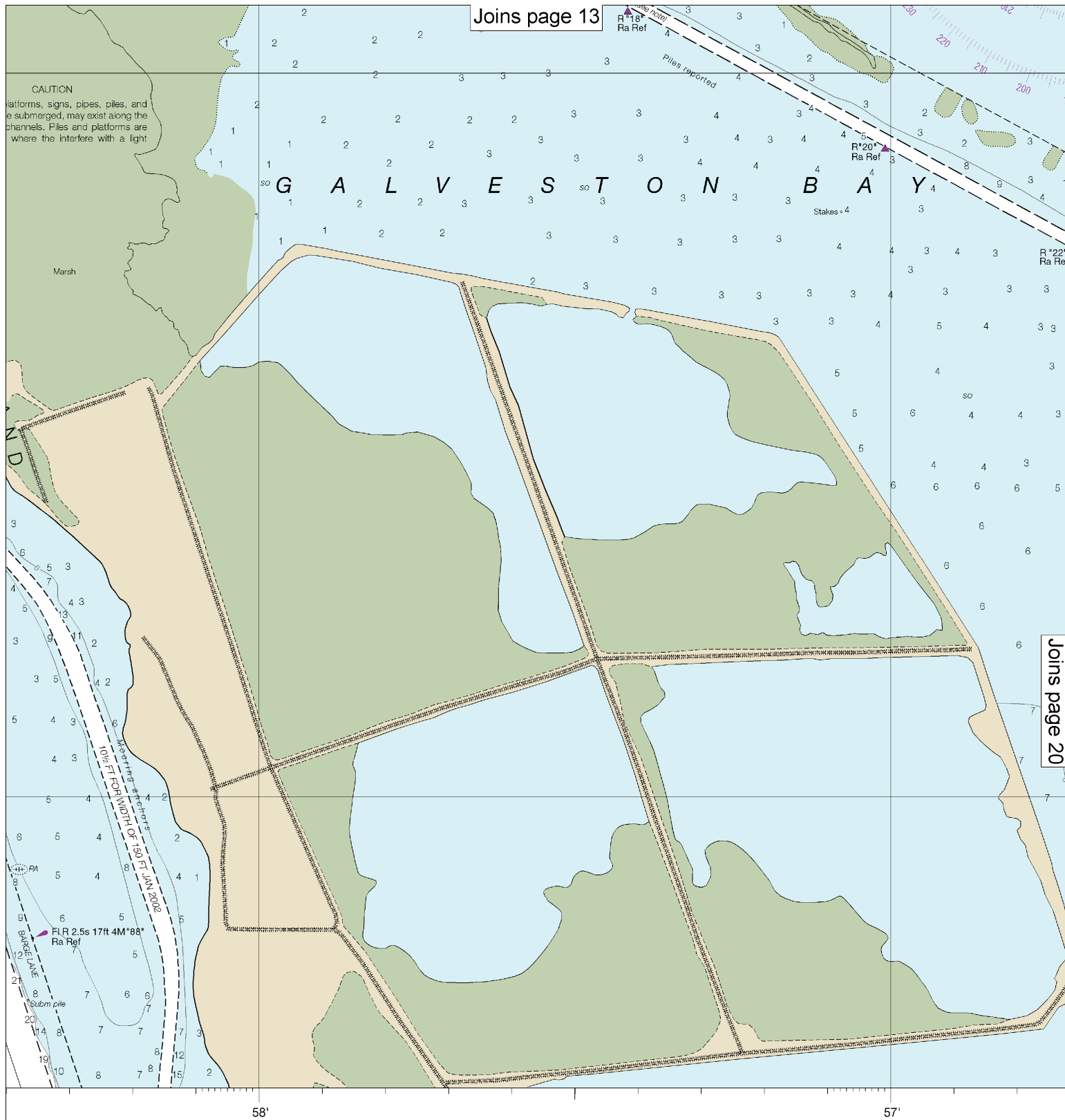
SOUNDINGS IN FEET

Published at
U.S. DEPARTMENT OF
NATIONAL OCEANIC AND ATMOSPHERIC
NATIONAL SYSTEMS
COAST AND GEODETIC SURVEY

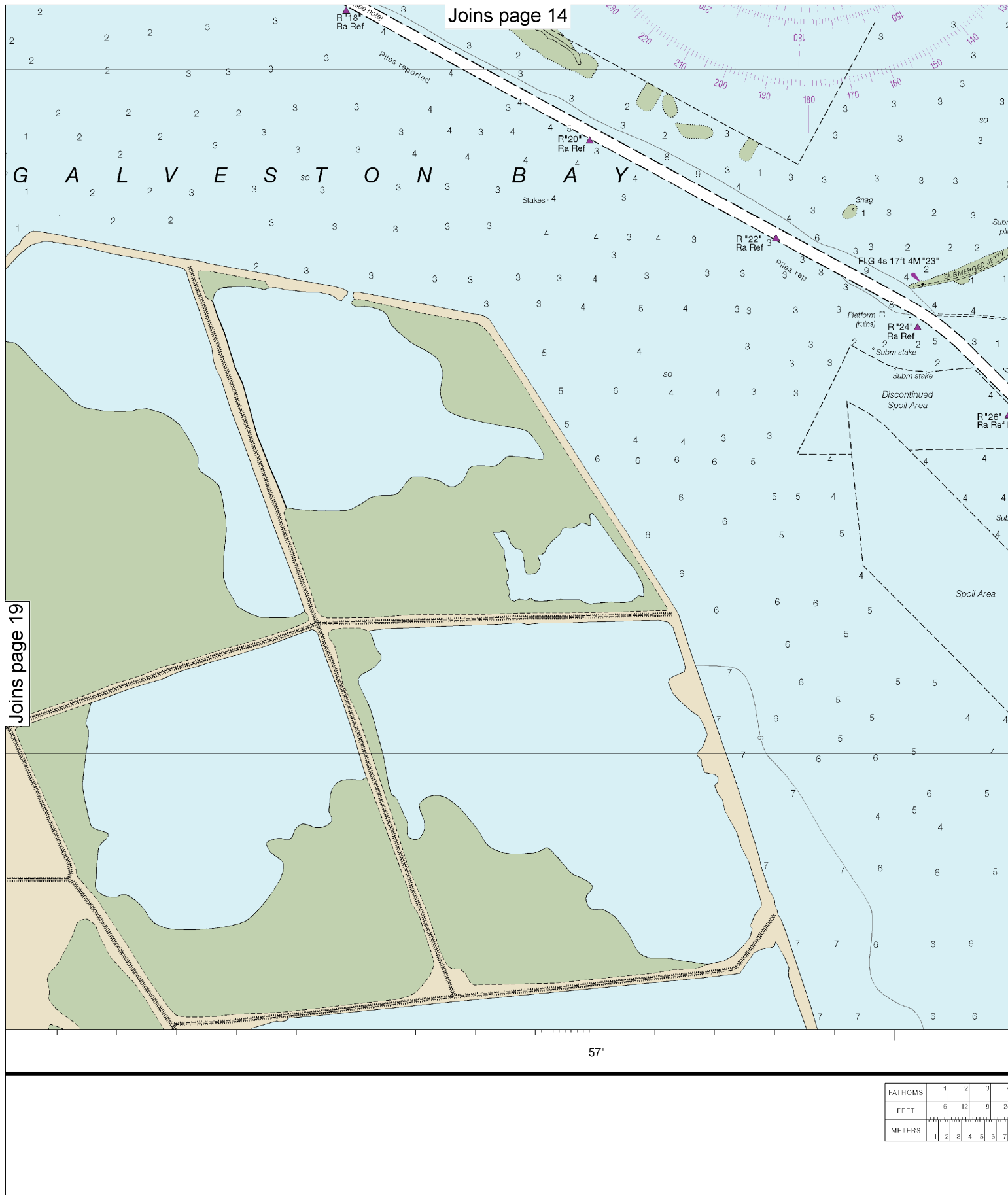
18

Note: Chart grid lines are aligned with true north.





at Washington, D.C.
MENT OF COMMERCE
ATMOSPHERIC ADMINISTRATION
L OCEAN SERVICE
AST SURVEY



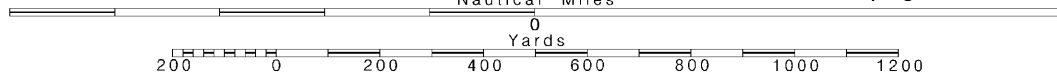
20

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.





VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

Quick References

Nautical chart related products and information	—	http://www.nauticalcharts.noaa.gov
Interactive chart catalog	—	http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml
Report a chart discrepancy	—	http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx
Chart and chart related inquiries and comments	—	http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	—	http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	—	http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	—	http://tidesandcurrents.noaa.gov
Marine Forecasts	—	http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	—	http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	—	http://www.nowcoast.noaa.gov/
National Weather Service	—	http://www.weather.gov/
National Hurricane Center	—	http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	—	http://ptwc.weather.gov/
Contact Us	—	http://www.nauticalcharts.noaa.gov/staff/contact.htm



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